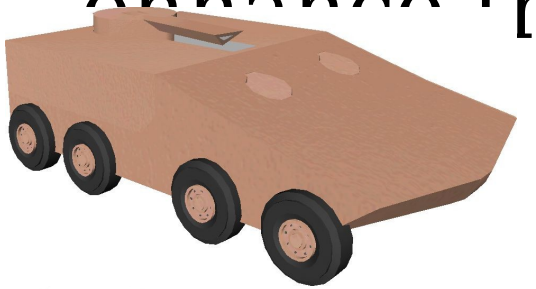
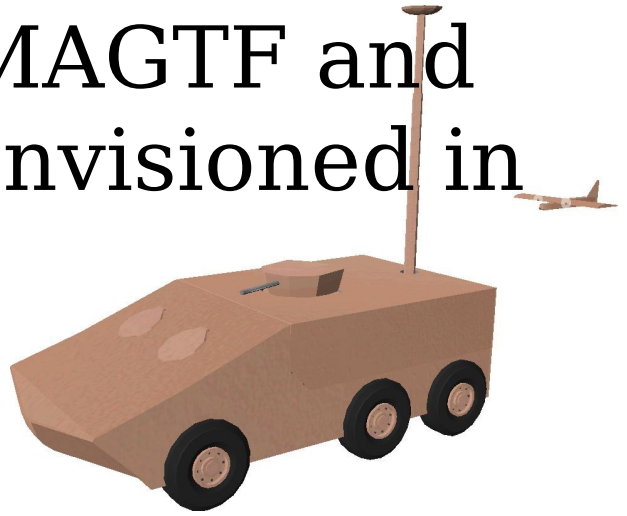
MEFFV…

A family of fighting vehicles replacing the Marine Corps' legacy M1A1 and family of LAV vehicles with modularized, highly capable combat platforms that extend the reach of the MAGTF and enhance the capabilities envisioned in EMW.



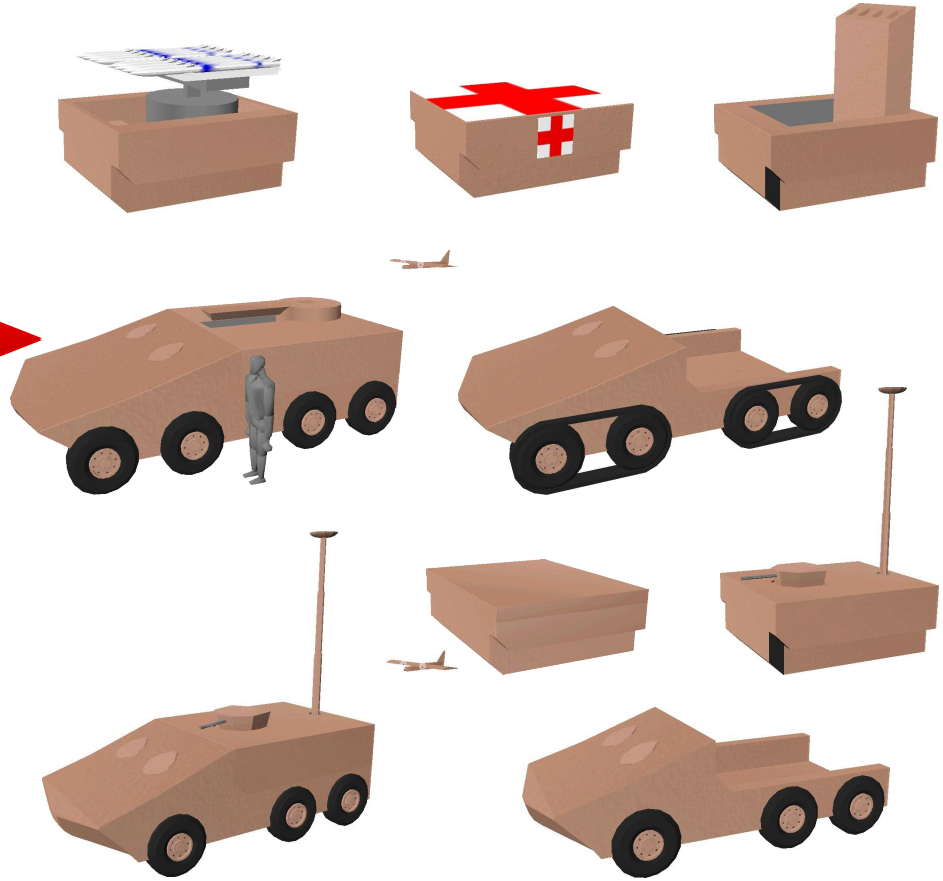


Why MEFFV is Needed:

Replace the aging LAV and M1A1in the 2015-2020 timeframe with a family of vehicles that maximize new technologies in the areas of lethality, survivability, mobility, sustainability, & reliability

M1A1
2020
Too Heavy
Logistics Burden

LAV
2015
Lacks Survivability
Increasing O&S



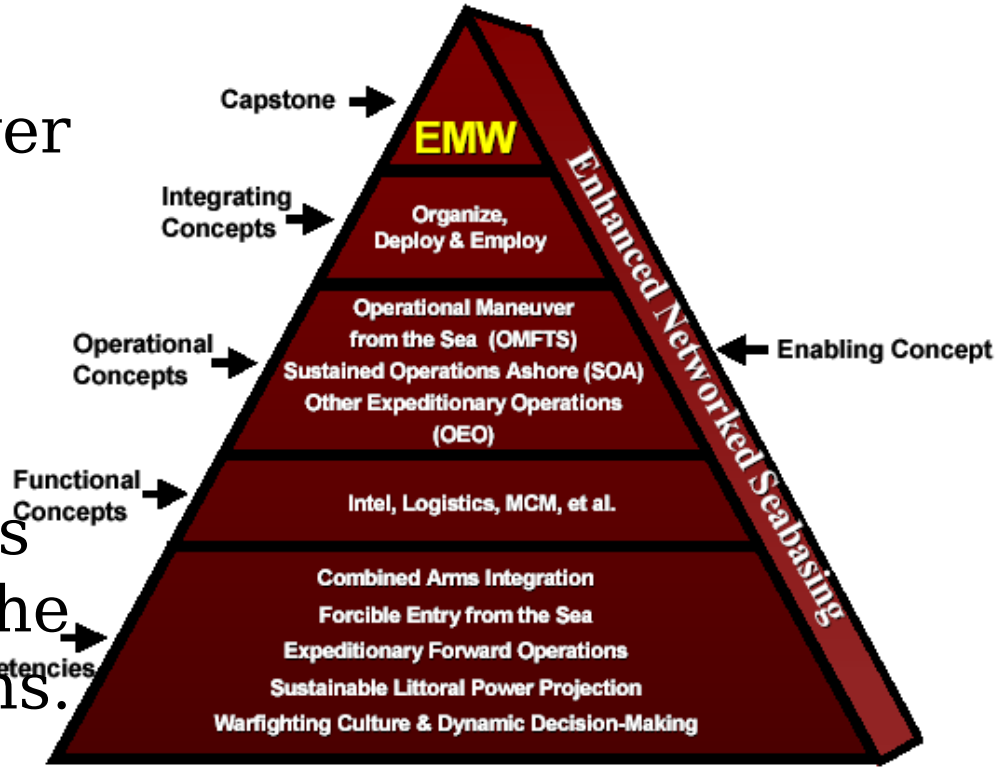
MAGTF Expeditionary Family of

MEFFV's Contribution to EMW

Enhance the operational maneuver capability of EMW by:

- Providing the MAGTF with an operationally mobile, sustainable combined arms maneuver unit extending expeditionary reach and combat power throughout the Joint Operations Area.

- Providing the mobile MAGTF with a maneuver unit which has equivalent mobility for combat and combat support platforms.
- Conducting all missions currently assigned to the Tank and LAR battalions.



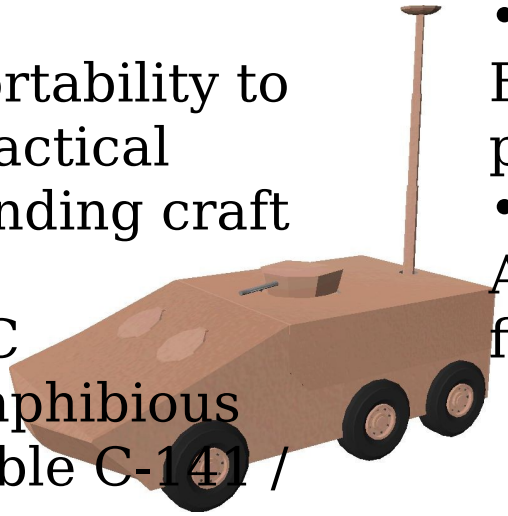
MEFFV Core Characteristics

Strategically and Operationally Expeditionary

• Improved tactical mobility in the littorals, amplifying the MAGTF STOM capability
• 14 ton variants: air transportability to be determined, should get “tactical groupment” aboard single landing craft if possible.
• 30 ton variants: 2 per LCAC
• Some variants: Riverine amphibious
• All variants: Air-transportable C-141 / C-17 / C-5

Improved Lethality:

• M1A1-like or better LOS Lethality
• Network enabled BLOS precision lethality
• Integration into ACE & naval surface fires



Survivability for Close Combat:

• Robust, high tech base armor for direct fire survivability
• Active Protection Systems and reduced vehicle signature
• Improved SA from LAV

Sustainability from the Seabase:

• Reduced logistics footprint through demand reduction, platform efficiency, improved reliability, and platform commonality
• Untethers MAGTF armored units from current logistics burdens

MEFFV Family of Systems at a Glance

30 Ton Variants

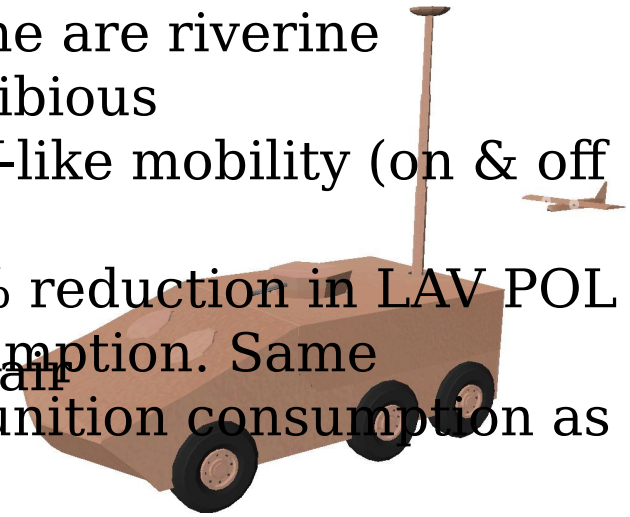
- Common 30 ton heavy chassis
- Length: Approx 20 feet long
- Height: Approx 96 inches tall
- Width: Approx 8.5 feet wide
- Dimensions may change between variants depending on vehicle mission
- Not amphibious
- EFV-like mobility (on & off road)
- 50% reduction in M1A1 POL consu
ammu
M1A1

All Variants:

- Capable of 96 hours of combat operations with air re-supply only (objective)

14 Ton Variants:

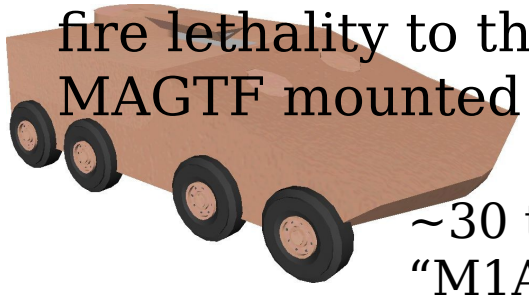
- Common 14 ton light chassis
- Length: Approx 20 feet long
- Height: Approx 96 inches tall
- Width: Approx 8 feet wide
- Dimensions will change between variants depending on vehicle mission
- Some are riverine amphibious
- LAV-like mobility (on & off road)
- 25% reduction in LAV POL consumption. Same ammunition consumption as LAV



Conceptual MEFFV Variants (1 of 2)

M1A1 Replacement Variant:

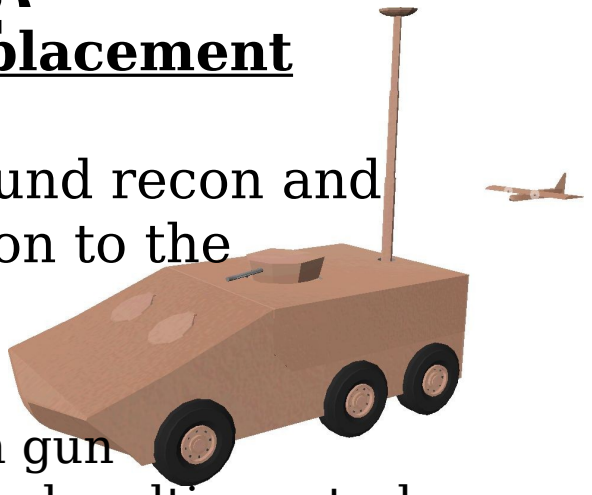
Provide tank-like survivability and direct fire lethality to the MAGTF mounted assault



~30 tons: 2 per LCAC
"M1A1-like" lethality

LAV-25 Replacement Variant:

Provide ground recon and counter-recon to the MAGTF



~14 tons
30mm chain gun
Mast mounted multi-spectral sensor
Organic micro UAV, network enabled

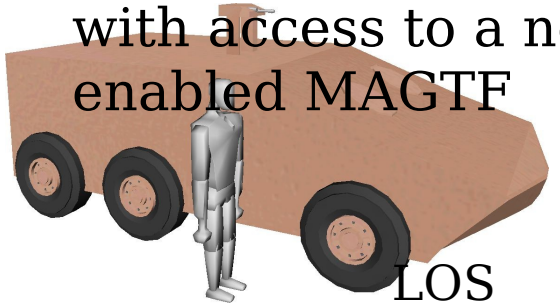
LAV-Mortar Replacement Variant:

Provide organic indirect fire support to the MAGTF Bn or Co

120mm EFSS-like mortar
or "box of rockets"
~14 tons

LAV C2 Replacement Variant:

Provide a mobile C2 station with access to a network enabled MAGTF



~14 tons
C2 suite with
LOS
& OTH Comms &
wireless battlefield

Conceptual MEFFV Variants (2 of 2)

LAV-L Replacement Variant:
Provide a logistics platform for the MAGTF with commensurate mobility

~14 tons
Logistics Support Vehicle

MEFFV Ambulance Variant:
Provide medical evacuation and care to the MAGTF

~14 tons
Carries up to 4 litters horizontally

- MEFFV remains in concept development through 2006 with IOC targeted between 2015 and 2020.
- The MEFFV Program Office, in conjunction with MCCDC, is continuing an ongoing intensive program of analysis and concept development.